

IN THE SPECIFICATION:

Please replace paragraph number [0005] with the following rewritten paragraph:

[0005] In many semiconductor applications, formation of conductive bumps or other external conductive elements on the bond pads of a die is desirable, if not necessary, to connect the die to external conductors. The most common applications where conductive bumps or other elements are used include tape automated bonding (TAB), flip-chip attachment of a die to a carrier substrate, and direct chip attachment (DCA) of a die to a carrier substrate. Conductive bumps may comprise metals or alloys including, without limitation, conventional ~~tin/lead~~ tin/lead solders, or may comprise conductive or conductor-filled epoxies, all as known in the art. Formation of the conductive bumps used in these applications can be accomplished using a variety of commonly known methods, such as deposition onto bond pads by screening or printing, preform ball or bump placement, or ball bumping using wire bonding equipment to form each individual bump *in situ*.

Please replace paragraph number [0028] with the following rewritten paragraph:

[0028] If solder is employed in paste form (rather than as preformed, already-reflowed balls), a proper amount of solder paste per segment should be used to adequately cover the intermediate conductive elements 20, to remain tacky without slumping, and to create a ball having sufficient size for the intended application when the solder paste is reflowed. Suitable solder pastes for use with the instant process can comprise any combination of chemical components that produces paste properties resulting in the desired chemical and physical characteristics for application (e.g., bonding characteristics and viscosity), reflow, cleaning, and formation of the final, encapsulated, raised ball-bond semiconductor structure. For example, the selected solder paste should be able to substantially retain the original printed or dot-dispensed pattern at room temperature and during reflow. Because the spacing or pitch between bond pads is continually decreasing in the art, adequate control of slump is increasingly critical to the prevention of bridging and shorting between bond pads. Likewise, the solder paste should, when

reflowed as described hereafter, uniformly coalesce to a substantially spherical ball that is substantially free of surrounding small satellite balls. Preferably, the solder paste is a ~~low-~~low-melting-point alloy, usually of lead (Pb) and tin (Sn), that can wet copper, conduct current, and mechanically join conductors and the like. Other suitable ingredients for use as a solder paste include, without limitation, aluminum, palladium, gold, copper, indium, silver, tin, lead and combinations or alloys thereof. The solder paste may conventionally include a blend of the desired weight percent of alloy powder into a flux to produce a homogeneous product. The viscosity of the solder paste should be adjusted, if necessary, to prevent problems such as spattering, excessive slump, overly rapid drying on the stencil screen and accompanying loss of tack, clogging of stencil apertures, stringing, smearing, inadequate solder deposition, and nonwetting. Use of solder pastes containing solvent-soluble and water-soluble ingredients is preferred since these ingredients substantially evaporate during the reflow process, thus leaving a minimal residue that is, by formulation, removable with either water or solvent.